

**APPENDIX B**  
**PENDING CLAIMS**

1. (twice amended) A method for identifying a compound that modulates signal transduction in taste cells, the method comprising the steps of:
  - (i) contacting a cell which expresses a taste cell specific G-protein alpha subunit polypeptide and a taste cell specific G protein coupled receptor with the compound, the G-protein alpha subunit polypeptide comprising greater than 70% amino acid sequence identity to a polypeptide having a sequence of SEQ ID NO:2; and
  - (ii) determining a functional effect of the compound upon the cell expressing the taste cell specific G-protein alpha subunit polypeptide and the taste cell specific G protein coupled receptor, thereby identifying a compound that modulates signal transduction in taste cells.
2. (as filed) The method of claim 1, wherein the G-protein alpha subunit polypeptide specifically binds to polyclonal antibodies generated against SEQ ID NO:2.
3. (as filed) The method of claim 1, wherein the G-protein alpha subunit polypeptide is recombinant.
4. (as filed) The method of claim 1, wherein the functional effect is a chemical effect.
6. (once amended) The method of claim 1, wherein the functional effect is determined by measuring increased or decreased binding of radiolabeled GTP to the G-protein alpha subunit polypeptide or to a G protein comprising the G-protein alpha subunit polypeptide.

7. (as filed) The method of claim 1, wherein the G-protein alpha subunit polypeptide is from a mouse, a rat or a human.

8. (as filed) The method of claim 1, wherein the G-protein alpha subunit polypeptide comprises an amino acid sequence of SEQ ID NO:2.